



A	B	C	D	E	F
Sequence Number	Primary Bit Stream (8B words)	10B Code Name	10B Code for Current RD-	10B Code for Current RD+	10B Code Selection Logic
1	000 00001	/D1.0/	011101 0100	100010 1011	10B Code selected to balance the running disparity of the encoded bit stream
2	000 00101	/D5.0/	101001 1011	101001 0100	10B Code selected to balance the running disparity of the encoded bit stream
3	000 11010	/D26.0/	010110 1011	010110 0100	10B Code selected to balance the running disparity of the encoded bit stream
4	000 01111	/D15.0/	010111 0100	101000 1011	10B Code selected to balance the running disparity of the encoded bit stream

FIG. 1
(PRIOR ART)



A	B	C	D	E	F	G
Sequence Number	Primary Bit Stream (8B words)	10B Code Name	10B Code for Current RD-	10B Code for Current RD+	Additional Bit Stream	10B Code Selection Logic
1	000 00001	/D1.0/	011101 0100	100010 1011	0	10B Code selected to represent the bit of the additional bit stream
2	000 00101	/D5.0/	101001 1011	101001 0100		10B Code selected to balance the running disparity of the encoded bit stream
3	000 11010	/D26.0/	010110 1011	010110 0100	1	10B Code selected to represent the bit of the additional bit stream
4	000 01111	/D15.0/	010111 0100	101000 1011		10B Code selected to balance the running disparity of the encoded bit stream

FIG. 2

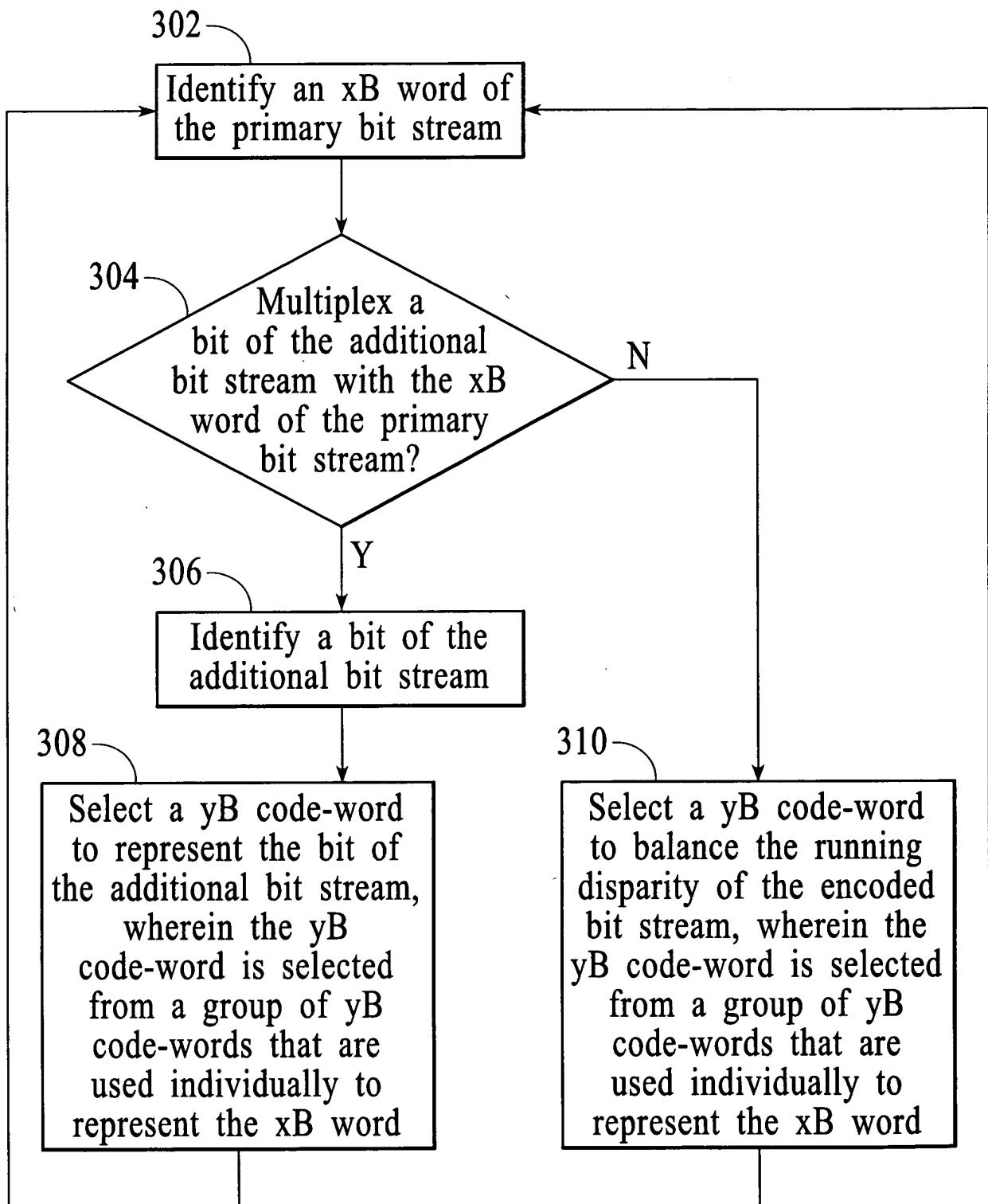
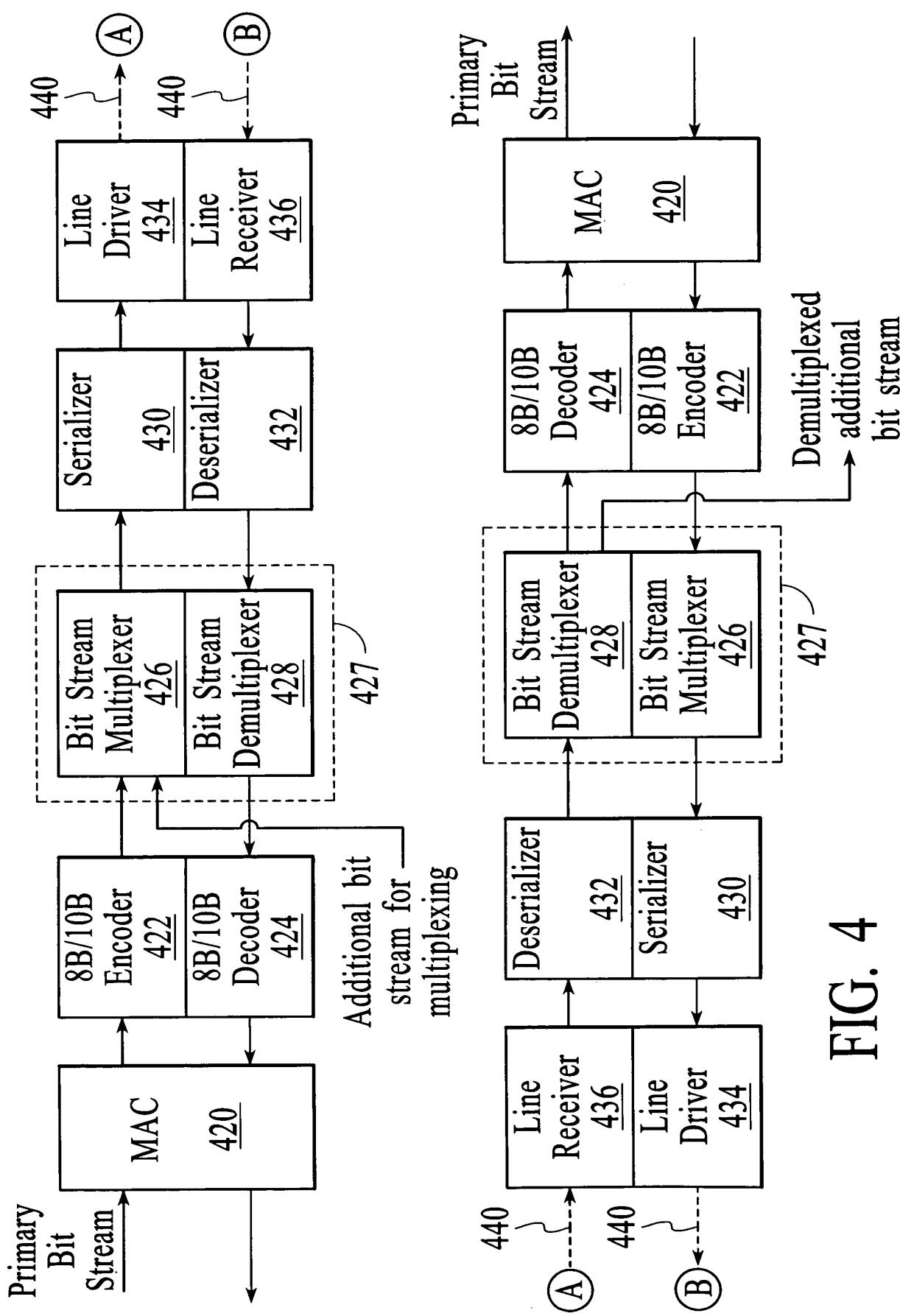
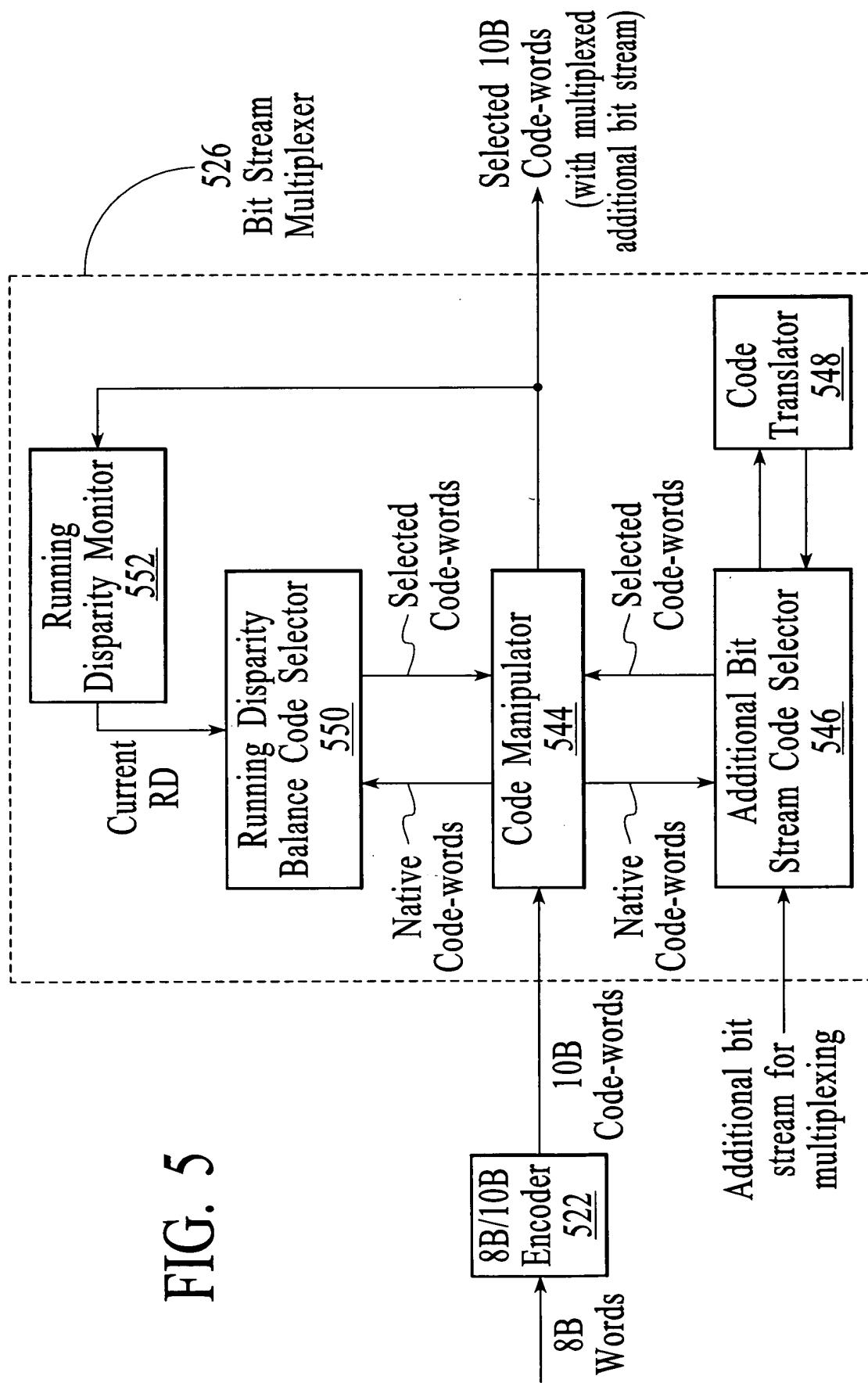


FIG. 3





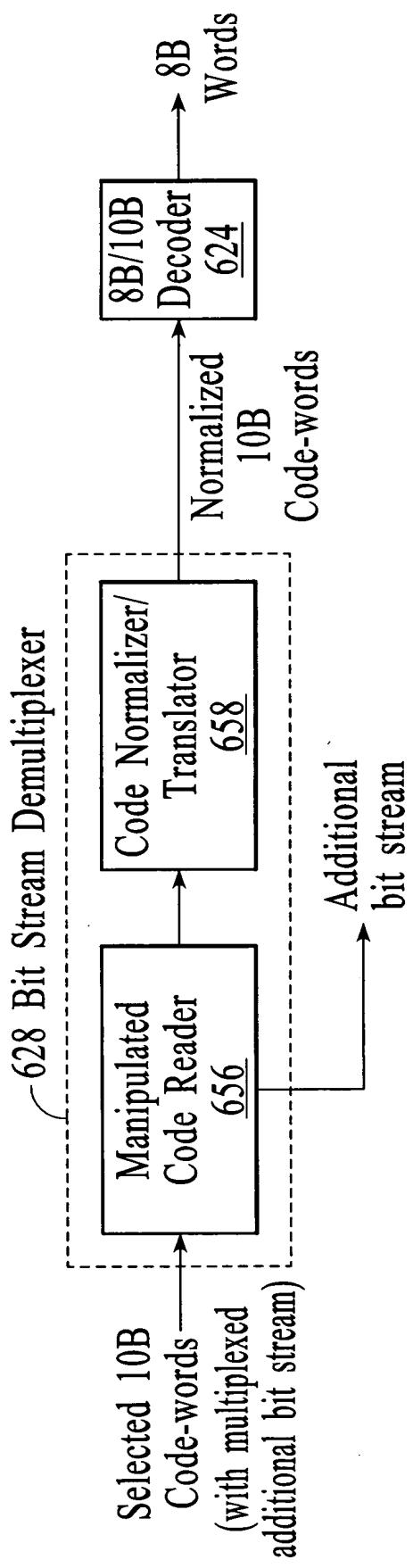
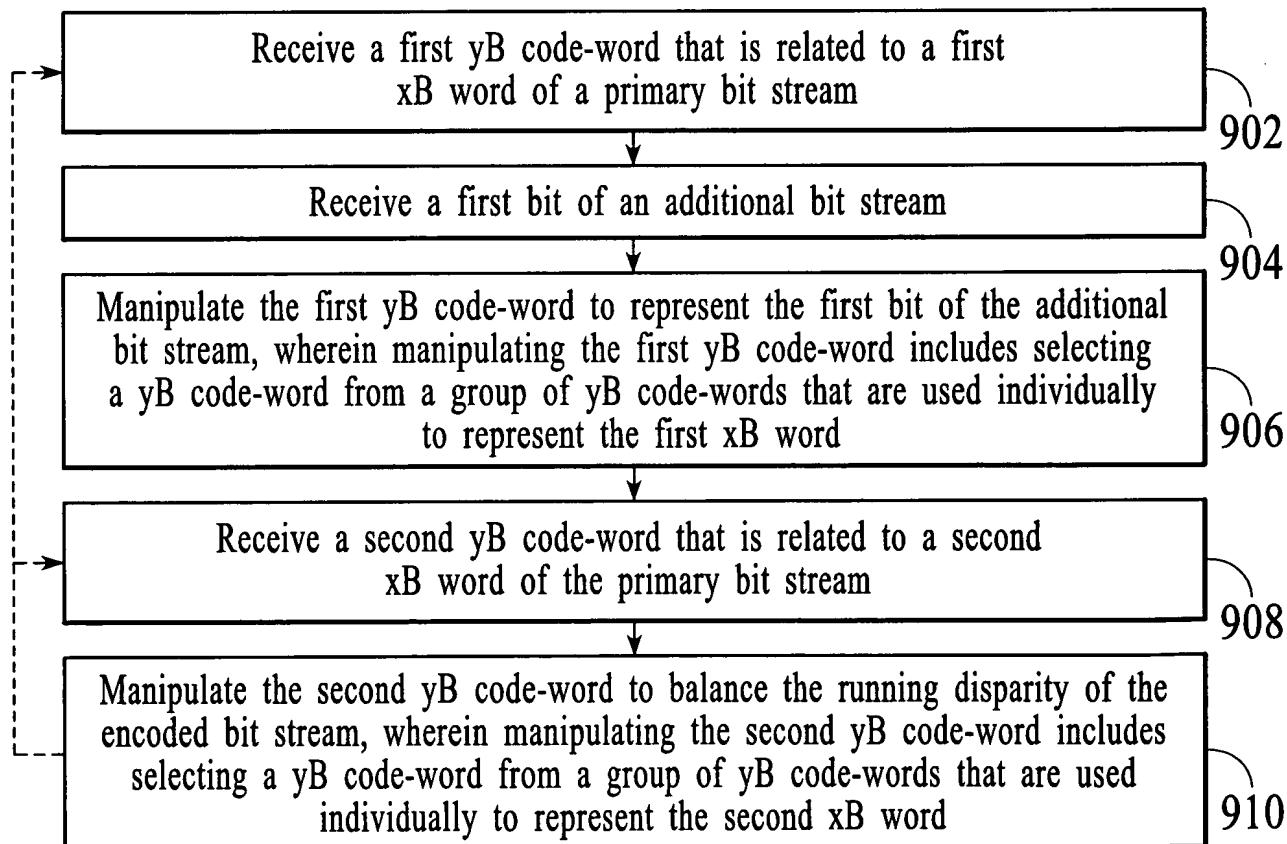
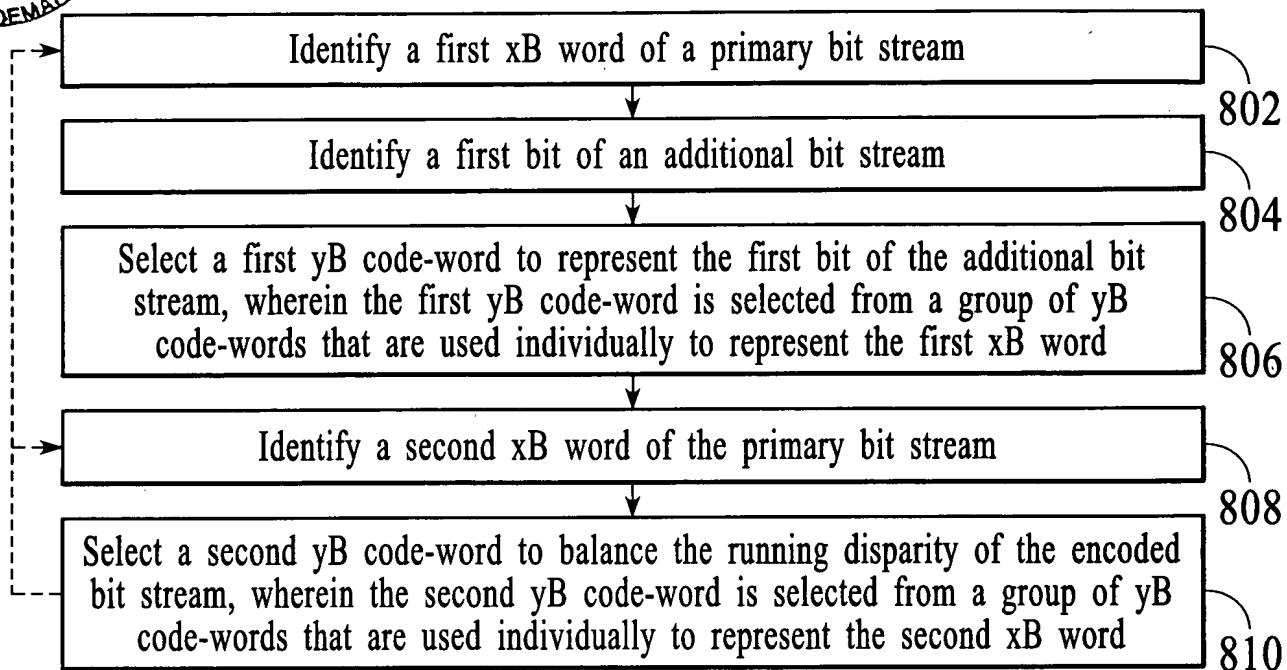


FIG. 6



A	B	C	D	E ₍₊₎	F ₍₋₎	G	H	I	J	K	L	M	N
	Data Bits (8B Codes)	Byte Value	10B Code Name	10B Code for Current RD- (DC Balance + or Neutral)	10B Code for Current RD+ (DC Balance - or Neutral)	New RD	RD Before Code Selection	Selected 10B Code	RD After Code Selection	Multiplexed Additional Bit Stream	RD Before Code Selection	Selected 10B Code	RD After Code Selection
1	000 00001	01	D1.0/	011101 0100	100010 1011	S	-	+	-	0	-	-	-
2	000 00101	05	D5.0/	101001 1011	101001 0100	F	-	+	+	1	+	+	+
3	000 11010	1A	D26.0/	010110 1011	010110 0100	F	+	-	-	0	+	-	+
4	000 01111	0F	D15.0/	010111 0100	101000 1011	S	-	+	+	1	+	-	+
5	100 11101	9D	D29.4/	101110 0010	010001 1101	S	-	+	+	0	+	-	+
6	011 11111	7F	D31.3/	101011 0011	010100 1100	F	-	+	+	0	+	-	-
7	101 01111	AF	D15.5/	010111 1010	101000 1010	F	+	-	-	1	+	-	-
8	110 11000	D8	D24.6/	110011 0110	001100 0110	F	-	+	+	0	+	-	+
9	001 11111	3F	D31.1/	101011 1001	010100 1001	F	+	-	-	1	+	-	+
10	111 11110	FE	D30.7/	011110 0001	100001 1110	S	-	+	+	0	+	-	+
11	001 00111	27	D7.1/	111000 1001	000111 1001	S	-	+	+	1	+	-	+
12	001 01111	2F	D15.1/	010111 1001	101000 1001	F	-	+	+	0	+	-	+
13	000 10110	16	D22.0/	011010 1011	011010 0100	F	+	-	-	1	+	-	+

FIG. 7



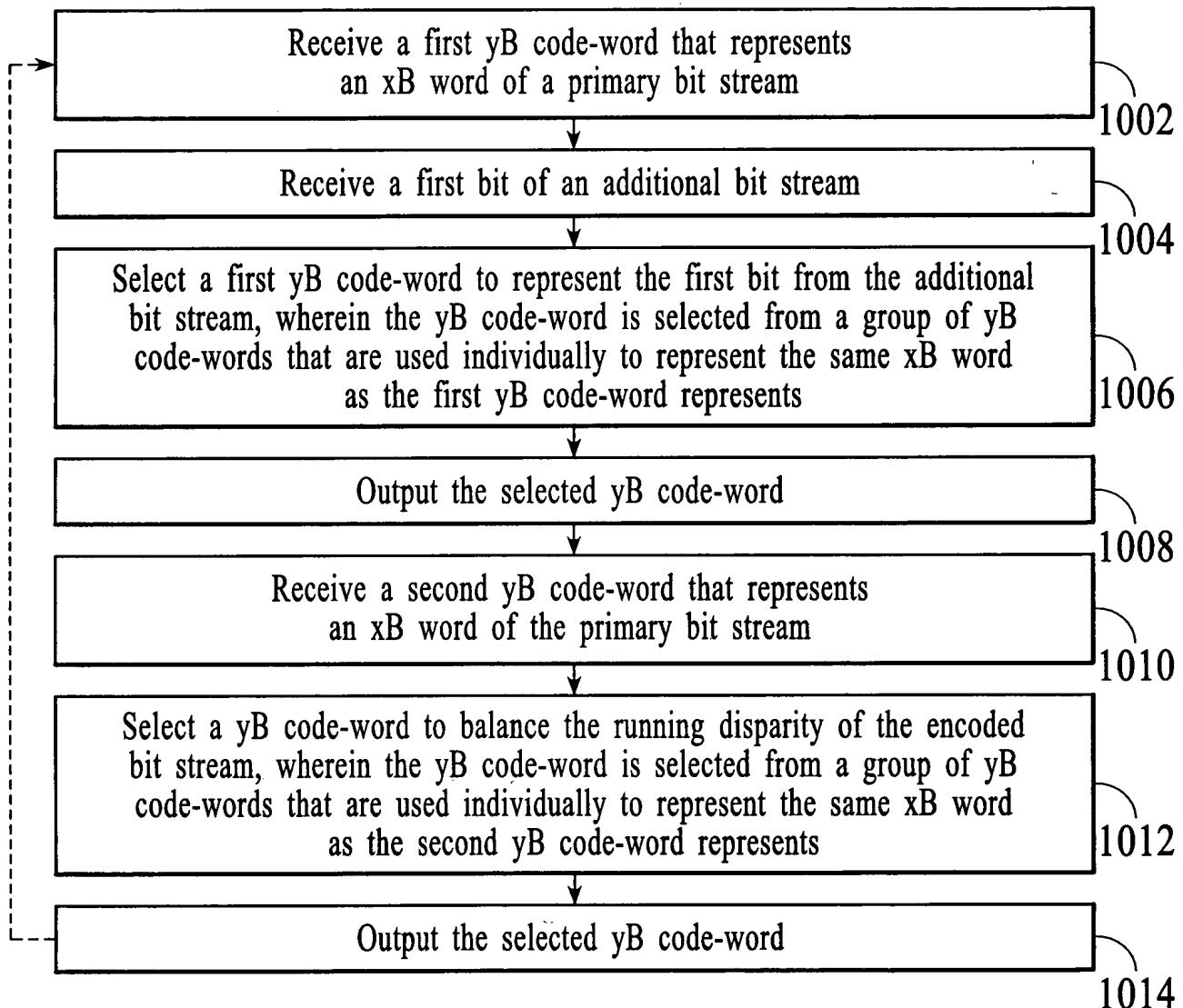
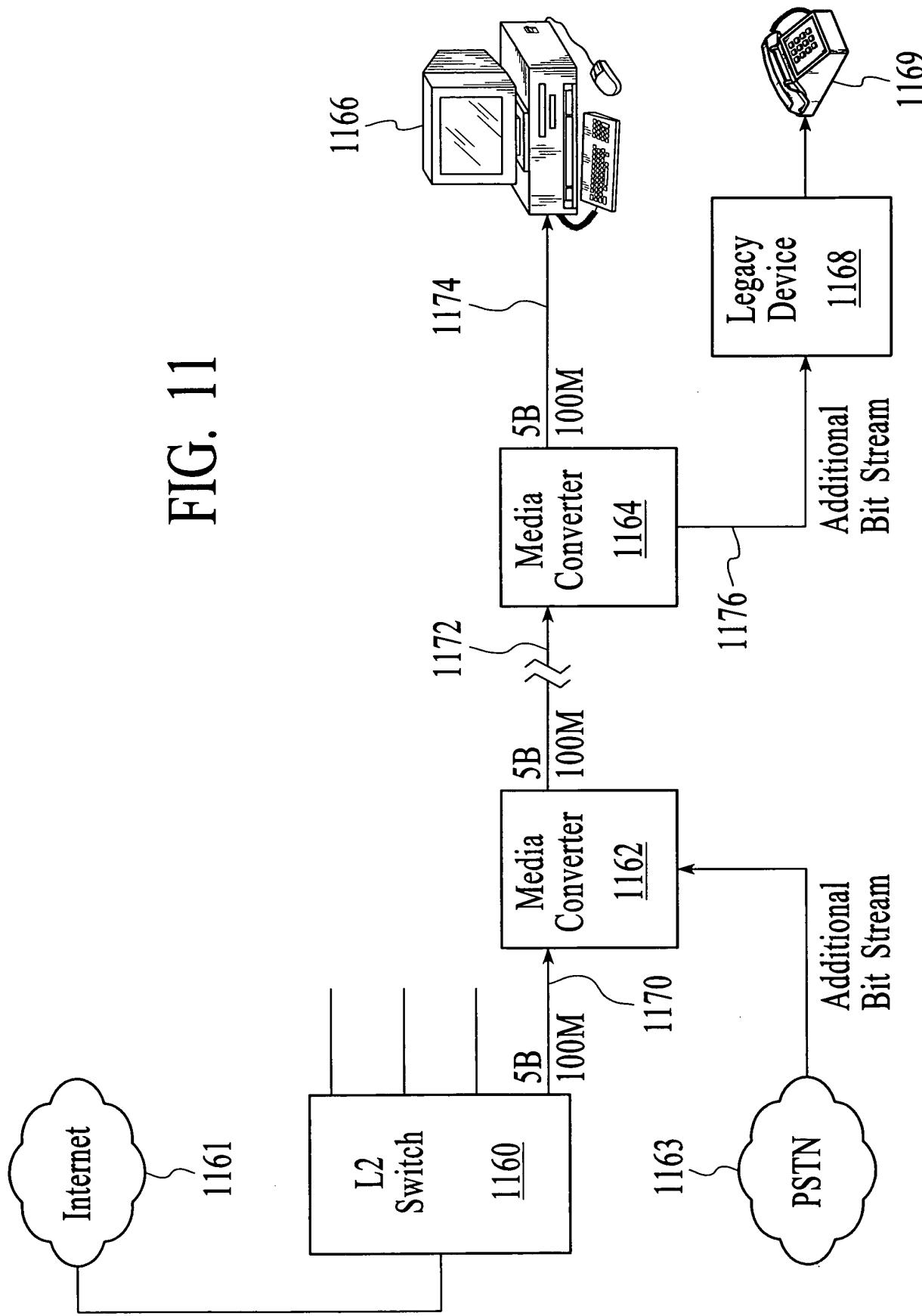


FIG. 10



FIG. 11



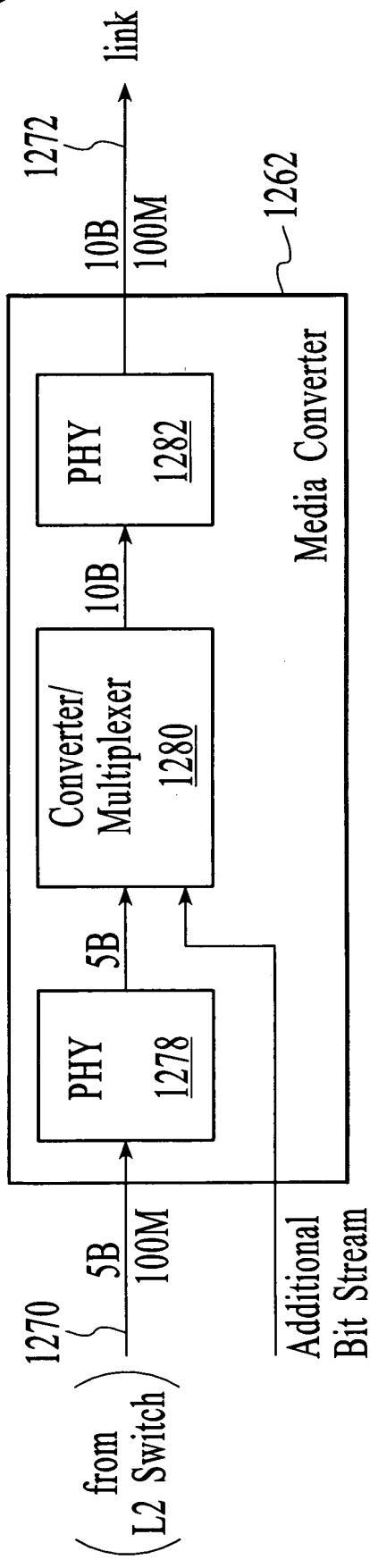
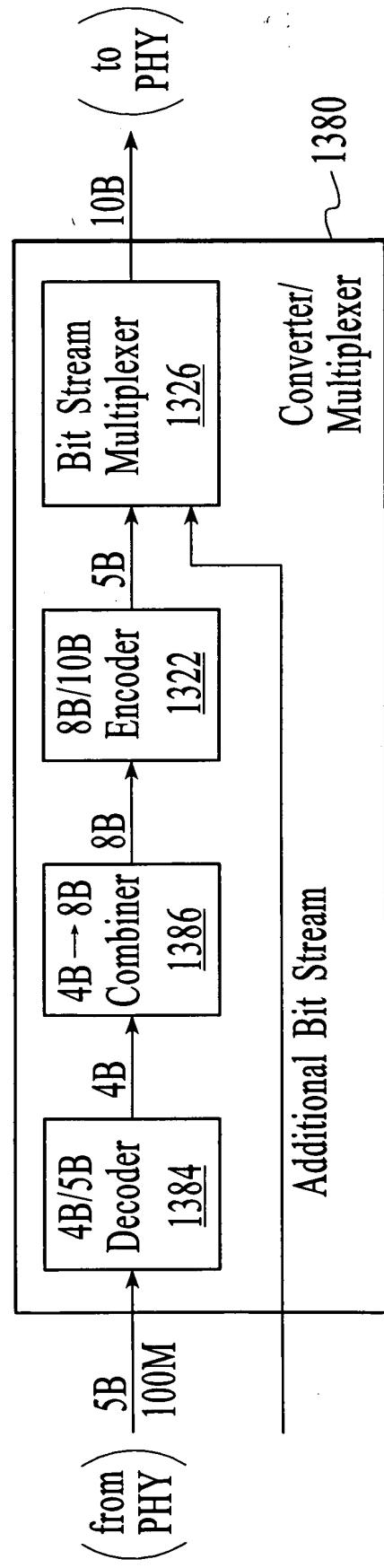


FIG. 12



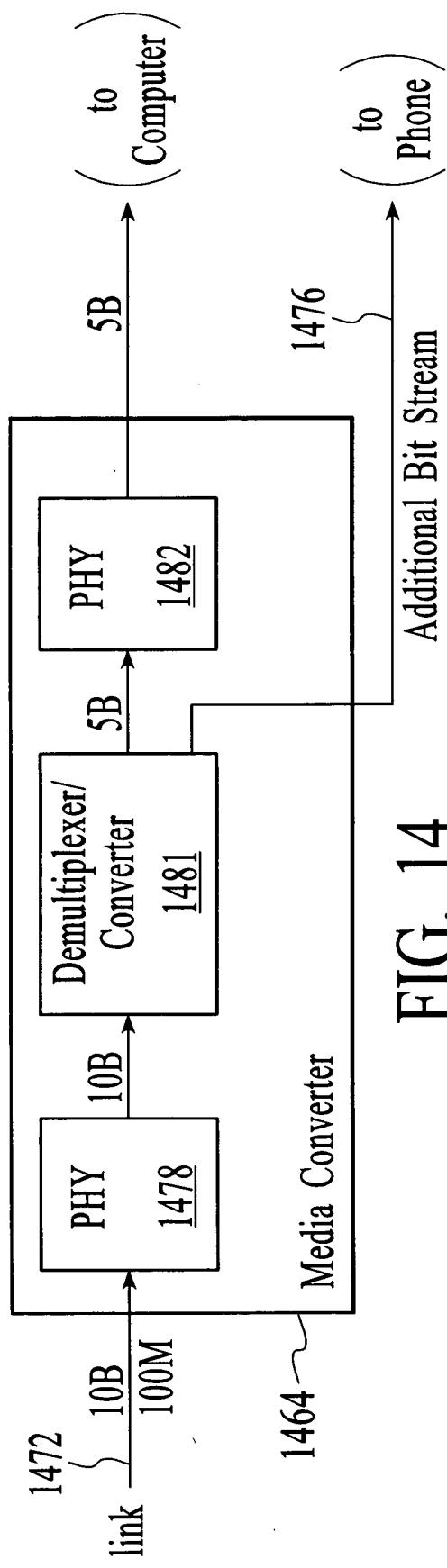


FIG. 14

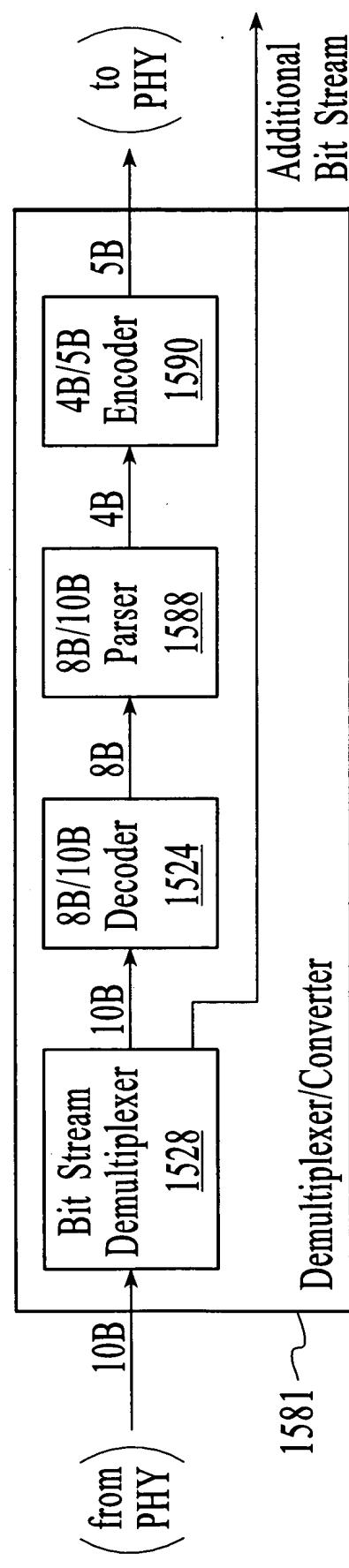
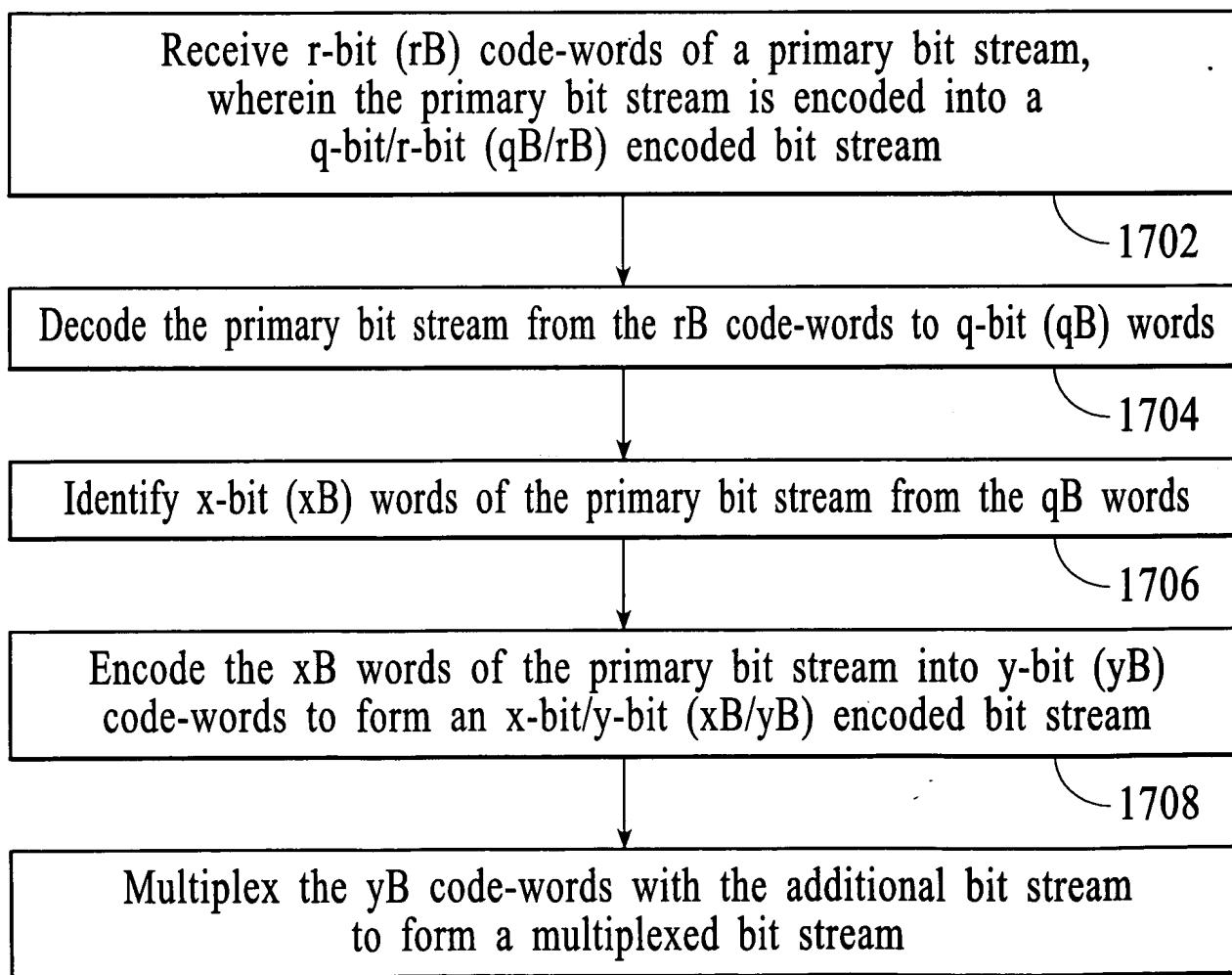
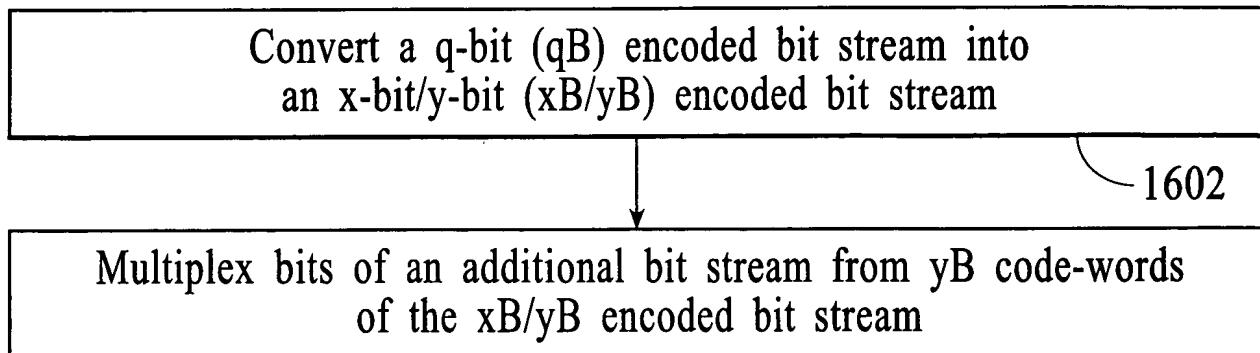


FIG. 15



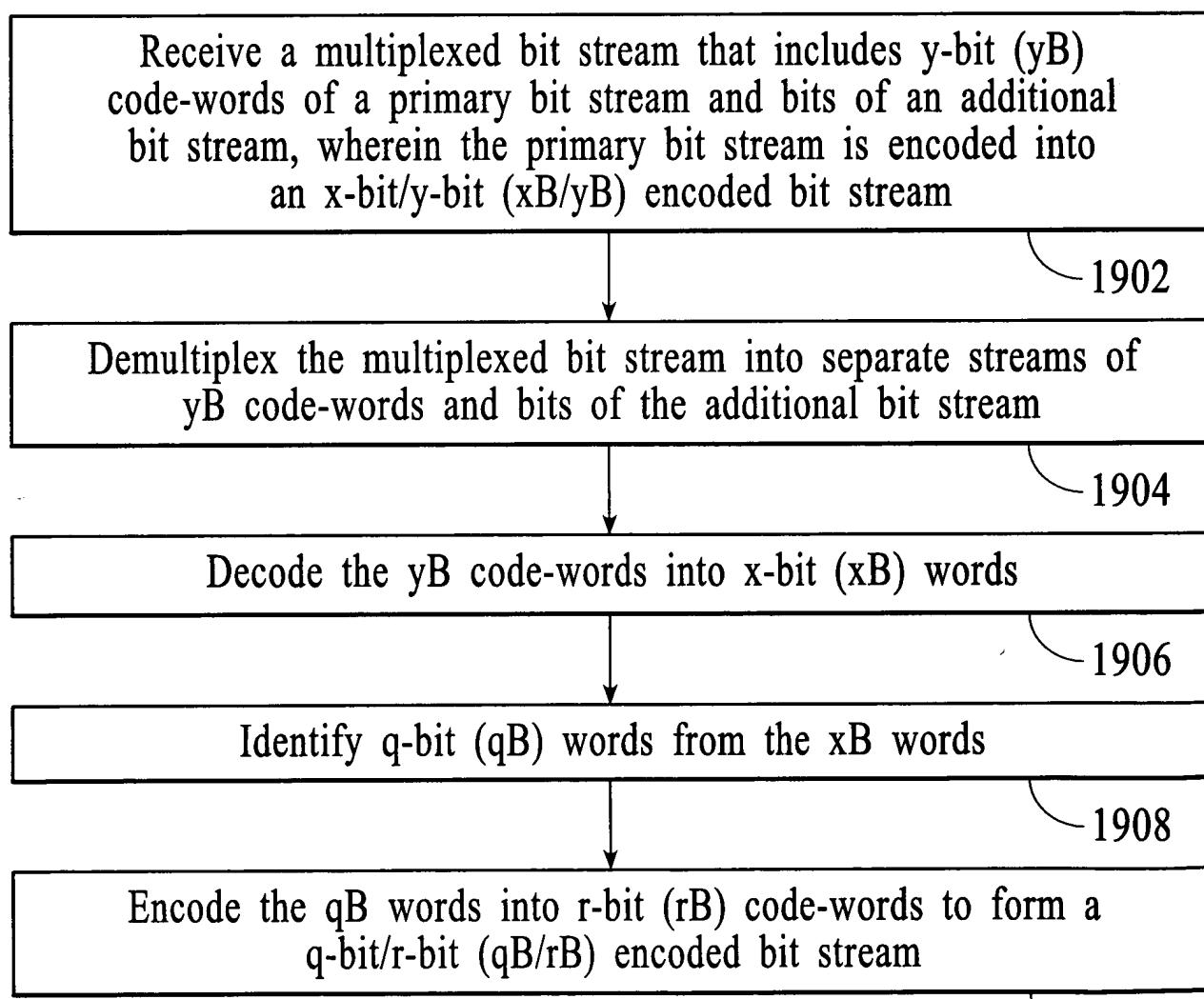
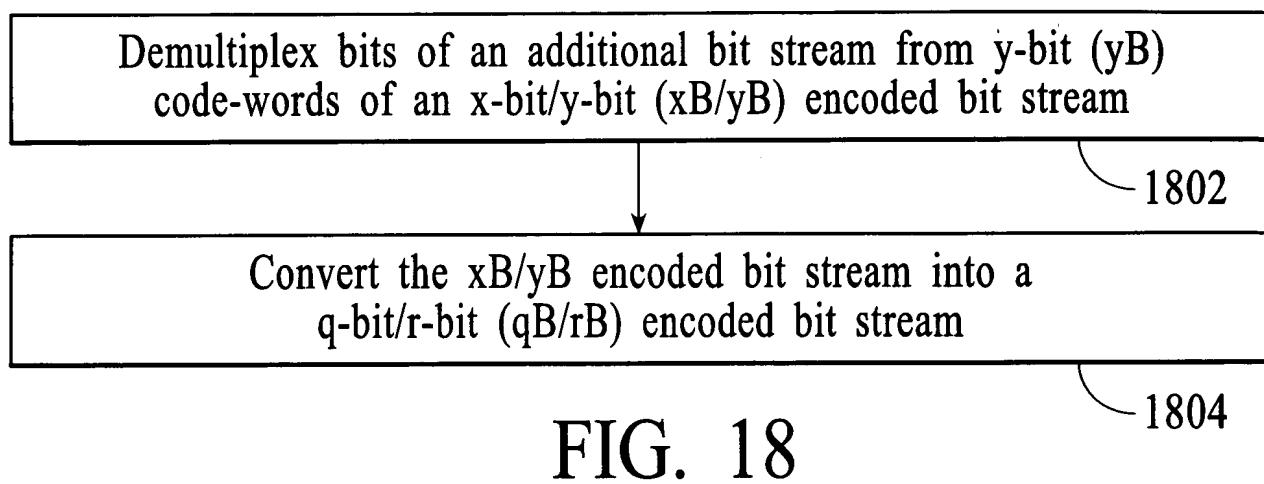


FIG. 19